REMARKS

Favorable reconsideration and allowance of this application are requested.

At the outset, applicants' undersigned representative sincerely appreciates the time and courtesies extended by Examiner Cole during the personal interview of June 11, 2008. It is believed that the interview materially advanced prosecution of this application. The substance of the interview discussion is adequately stated in the Examiner's Interview Summary Record and thus further comment thereon appears unnecessary.

Procedurally the present amendment is being filed concurrently with a formal Request for Continued Examination (RCE) under 37 CFR §1.114. Accordingly withdrawal of the "finality" of the March 7, 2008 Official Action is in order so as to allow entry and consideration of the amendments and remarks presented herewith.

1. Discussion of Claim Amendments

By way of the amendment instructions above, claim 1 has been amended so as to more clearly define the attributes of the claimed process. Specifically, claim 1 now recites that the precursor is exposed to a temperature within the melting point range of the polyolefin staple fibres for a time sufficient to soften the staple fibers ***without partial melting*** and allow adjacent staple fibers to ***at least partly fuse*** to one another. Support for the amended version of claim 1 can be found in the specification at page 3, lines 14-15 (*"…care should be taken not to apply too high a temperature as this may cause loss in strength of the product, resulting from e.g. partial melting…."*)

Claims 13-17 are new. In this regard, claims 13 and 16 are dependent from claims 10 and 1, respectively, and recite an outer surface layer of the monofilament-like product which has at least partly fused polyolefin staple fibers. Support for such claims

can be found at page 3, lines 24-26 (*"For a monofilament-like product showing low end fraying it suffices that the outer surface layer of fibres is at least partly fused…"*).

Claims 14 and 17 are dependent from claims 13 and 16, respectively, and define that the polyolefin staple fibers are at least partly fused to one in both the outer and inner layers of the monofilament-like product. Support for such claims can be found on page 3, lines 26-27 (*"…a higher degree of fusion , e.g. also binding fibres in more inner parts of a precursor or strand, however, is preferred…."*).

Claim 15 is in independent form and is supported by the same specification provisions as amended claim 1.

It is assumed that new claims 13-15 will be withdrawn from consideration as they are dependent from non-elected claims 10-12 or are directed to a product per se which as been held to have been constructively non-elected. However, it is believed that new method claims 16-17 are properly examined with the constructively elected subject matter of prior claims 1-9. Non-elected claims 10-15 directed toward a patentably distinct invention are being retained in the subject application pending consideration for rejoinder with claims 1-9 when allowed.

Favorable reconsideration and allowance of claims 1-9 and newly presented claims 16-17 are therefore requested.

2. Response to 35 USC §103(a) Rejection

Prior claims 1-3 and 5-9 attracted a rejection under 35 USC §103(a) as allegedly obvious from Cook et al (USP 6,148,597) in view of GB '432 (GB 2,218,432). In addition, prior claim 4 was separately rejected under this same statutory provision based on the combination of Cook et al, GB '432 and further in view of JP 646 (JP 87-015646). Applicants suggest that all claims pending in this application are patentable over the applied references of record.

In this regard, applicants note that the examples of Cook et al refer to braided and twisted lines made from gel spun polyethylene filaments that were subjected to a fusion process and a drawing process. In particular, in Example 11 the filaments of a braided line were dipped in mineral oil such that the yarn contained 12.7 mass% thereof, and then fused at a temperature of between 150 and 155 ^{0}C and drawn with a total draw ratio (DR) of 1.9 (Table 1, 1st column). Referring to the present application, in the Comparative Experiment A on page 13 the braided construction comprising multi-filament yams of gel spun ultrahigh molecular weight polyethylene (UHMWPE) was dipped in paraffin such that the paraffin content was 11 mass% and then fused at 153^{0}C while drawing with a DR of 1.9. These conditions are almost similar with those of Example 11 of Cook et al and thus serve as a comparison with the Cook et al product.

According to the applicants, Comparative Experiment A utilized yarns having continuous filaments. This fact is evident from the units used to express the titre of the yams which is dTex (pg. 13, In. 13). dTex is a known unit in the textile industry for expressing the titre of a yarn having *continuous* filaments. In contrast, if the yarn would have contained staple fibers, the titre of the yarn would have been expressed in Nm (see Example 1 where staple fibers were used).

Table 1 of the subject application therefore shows the improvement in the different properties between the products of the present invention and those of Cook et al.

Clear differences are revealed by a comparison between Comparative Experiment A (or Example 11 of Cook et at.) and the product of Example 13 of the present invention obtained with a method similar to that of the Comparative Experiment A (or Example 11 of Cook et al.), i.e. 12 mass% paraffin in the yam, fusion temperature of about 154 ^{0}C and DR of 1.6.

From the comparison it can be clearly seen that the abrasion resistance of the yarn increases from 5998 cycles until break (Comp. Exp. A) to 30620 cycles (Ex. 13). Therefore, the products obtained by the method of the present invention show improved abrasion resistance as expressed in the number of cycles until break as measured in the test described under Materials and Methods section of the present application. This advantage is clearly stated in the application as filed at pg. 2, In. 10-13.

Applicants further submit that the ordinarily skilled person finds no incentive to use staple polyolefin fibers either in Cook et al or in GB '432. In this regard, the arguments outlined in the prior response dated January 22, 2008 are equally germane here. However, applicants further note the following.

The present invention is in the field of monofilament-like products and processes of obtaining the same. Moreover, the invention is concerned mainly with solving the problem of reduced abrasion resistance, knot strength and knot strength efficiency of known yarns (pg. 1, In. 35-37; pg. 2, In.18-1 9).

GB '432 is not in the same technical field with the present invention, namely the field of processes for making a monofilament-like product. GB'432 relates to a process of ***impregnating*** a yam (pg. 1, In. 13-14). Therefore, it is doubtful that the ordinarily skilled person would even read the disclosure of GB '432 in the first instance. If read, however, the ordinarily skilled person would not equate it with processes for making a monofilament-like product.

Moreover, GB '432 does not mention any of the problems solved by the present invention. GB '432 only aims in removing air bubbles present in a yarn containing staple fibers (pg. 1, In. 9-12 and 32-34).

Therefore, the ordinarily skilled person would have no expectation of success in solving at least the above-mentioned problems by applying the teachings of GB '432

and he will be put on a wrong track when searching for the solution thereof because he will only learn how to remove said bubbles. Hence, the solution of the problems with which the present invention is concerned could never be obvious in view of the cited prior art because any attempt by the skilled person to establish a chain of considerations leading in an obvious way to the claimed subject matter of claim I is bound to fail.

It is also important to note that GB '432 does not mention ***polyolefin*** staple fibers. GB '432 indicates at page 2, lines 11-12 that staple fibers made of KEVLAR may be used, wherein KEVLAR is the registered Trade Mark for "polypropylene". This is a clear and obvious mistake and it will be immediately recognized as such by the skilled person who knows that KEVLAR is in fact an aramid and ***not*** polypropylene. Furthermore, aramid fibers like KEVLAR and NOMEX are not fusable, they simply degrade if heated at high temperature (please see http://www2.dupont.com/Kevlar/en_US/index.html, http://www2.dupont.com/Nomex/en_US/uses_apps/index.html and http://www.pleo.com/dupont/nomex/index.html for information on KEVLAR and NOMEX aramid fibers).

Therefore, the ordinarily skilled person would not be directed to the use of ***polyolefin*** staple fibers in a monofilament-like product from the disclosure of GB '432 since disclosure of KEVLAR and NOMEX brand fibers would be understood to be with reference to ***aramid*** fibers.

However, even if the skilled person would apply the teachings of GB '432, she would still not obtain the improved products of the present invention. As presented in applicants' previous response, GB'432 teaches to ***completely melt*** the fibers and therefore it cannot achieve fusion of the staple fibers.

The amended version of claim 1 clearly recites that the fibers are at least partly fused ***without the occurrence of partial melting*** of the staple fibers. Therefore, melting or even partial melting of the polyolefin staple fibers is not contemplated at all in the process of the present invention because this causes loss in strength of the product (pg. 3, In. 14-17).

In order for the Examiner to better visualize the product obtained by the process of the present invention, Exhibit A is attached which includes schematic drawing FIGS. 1 and 2 in which staple fibers have their surfaces at least partly fused. FIG. 1 depicts two staple fibers (101a) and (101b) having surfaces fused at two locations, (102a) and (102b). The dotted line (103) depicts the cross-section of the fused region.

FIG. 2 depicts a monofilament-like product comprising a yarn of staple fibers (101) having their surfaces at least partly fused at locations (102), wherein only the outer layer (104) of fibers in the yam is fused and wherein the fibers (101a - h) that are positioned towards the inside of the yam are not fused. FIG. 2 is therefore a schematic representation of a particular embodiment of the present invention detailed at pg. 3, In. 24-30 of the specification.

It is submitted that in view of the comments above, by combining the teachings of Cook at al. with GB '432, the ordinarily skilled person would never arrive at the yarn of the present invention. This conclusion is especially true after consideration is given to the requirement in GB '432 to completely melt the fibers.

Therefore, the amended version of claim 1 is not obvious in view of the combined cited references. JP '646 is noted but fails to cure the deficiencies of Cook et al and GB '432 as discussed above. Accordingly withdrawal of all rejections advanced under 35 USC §103(a) is in order.

3. Fee Authorization

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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